

# Natular™ XRG

## Mosquito Larvicide / Extended Release Granule

To be used in governmental mosquito control programs, by professional pest control operators, or in other mosquito or midge control operations.

Active Ingredient (dry weight basis): spinosad (a mixture of spinosyn A and spinosyn D)*	2.5%
Other ingredients	97.5%
Total	100.00%

U.S. Patent No. 5,362,634 and 5,496,931

\* A Naturalyte® Insect Control product

Natular XRG is a 2.5% extended release granule.

Group	5	INSECTICIDE
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## Keep Out of Reach of Children CAUTION

### Precautionary Statements

#### Hazards to Humans and Domestic Animals

Harmful if swallowed. Causes moderate eye irritation. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Avoid contact with eyes or clothing. Wear protective eyewear (such as goggles, face shield, or safety glasses).

First Aid	
If swallowed:	<ul style="list-style-type: none"> <li>Call a poison control center of doctor immediately for treatment advice.</li> <li>Have person sip a glass of water if able to swallow.</li> <li>Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> </ul>
If in eyes:	<ul style="list-style-type: none"> <li>Hold eye open and rinse slowly and gently with warm water for 15-20 minutes.</li> <li>Remove contact lenses, if present, after the first 5 minutes, then continue rinsing.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-992-5994 for emergency medical treatment information.	

#### Environmental Hazards

This product is toxic to aquatic organisms. Non-target aquatic invertebrates may be killed in waters where this pesticide is used. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

### Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Read all Directions for Use carefully before applying.

#### General Information

Natular XRG is a Naturalyte® insect product for killing mosquito and midge larvae. This product's active ingredient, spinosad, is biologically derived from the fermentation of *Saccharopolyspora spinosa*, a naturally occurring soil organism. Natular XRG releases

effective levels of spinosad for up to 30 [40] days under typical environmental conditions. Natular XRG may be applied with ground or aerial equipment.

### General Use Precautions

#### Integrated Pest Management (IPM) Programs

Natular XRG is intended to kill mosquito and midge larvae. Mosquitoes are best controlled when an IPM program is followed. Larval control efforts should be managed through habitat mapping, active adult and larval surveillance, and integrated with other control strategies such as source reduction, public education programs, harborage or barrier adult mosquito control applications, and targeted adulticide applications.

#### Insecticide Resistance Management (IRM)

Natular XRG contains a Group 5 insecticide. Insect biotypes with acquired resistance to Group 5 insecticides may eventually dominate the insect population if appropriate resistance management strategies are not followed. Currently, only spinetoram and spinosad active ingredients are classified as Group 5 insecticides. Resistance to other insecticides is not likely to impact the effectiveness of this product. Spinosad may be used in rotation with all other labeled products in a comprehensive IRM program.

To minimize the potential for resistance development, the following practices are recommended:

- Base insecticide use on comprehensive IPM and IRM programs.
- Do not use less than the labeled rates.
- Routinely evaluate applications for loss of effectiveness.
- Rotate with other labeled effective mosquito larvicides that have a different mode of action.
- In dormant rice fields, standing water within agricultural/crop sites, and permanent marine and freshwater sites, do not make more than 5 applications per year.
- Use insecticides with a different mode of action (different insecticide group) on adult mosquitoes so that both larvae and adults are not exposed to products with the same mode of action.
- Contact your local extension specialist, technical advisor, and/or Clarke Mosquito Control representative for insecticide resistance management and/or IPM recommendations for the specific site and resistant pest problems.
- For further information or to report suspected resistance, you may contact your local Clarke Mosquito Control representative by calling 800-323-5727.

### Application

Proper application techniques help ensure adequate coverage and correct dosage necessary to obtain optimum kill of mosquito and midge larvae. Apply Natular XRG prior to flooding as a pre-hatch application to areas that breed mosquitoes, or at any stage of larval development after flooding in listed sites. Do not apply to water intended for irrigation. Do not allow this product to drift onto neighboring crops or non-crop areas or use in a manner or at a time other than in accordance with label directions.

#### Ground Application

Use conventional ground application equipment that provides even coverage at labeled rates.

#### Aerial Application

Fixed wing aircraft or helicopters equipped with granular spreaders capable of applying rates from 5 to 20 lb per acre may be used to apply Natular XRG. Aerial application equipment should be carefully calibrated before use to be sure it is working properly and delivering a uniform distribution pattern. Avoid overlaps that will increase the dosage of Natular XRG above labeled limits.

Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator and the

treatment coordinator are responsible for considering all these factors when making application decisions.

#### **Application Sites and Rates**

Apply Natular XRG at 5 to 20 lb per acre. Rates are equivalent to [5.6 to 22.4 kg per hectare or] 5 to 20 g per 100 sq ft of water surface for efficacious kill of mosquito and midge larvae in the listed habitat sites. Within this range, use lower rates when water is shallow, vegetation and/or pollution are minimal, and mosquito populations are low. Use higher rates when water is deep, vegetation and/or pollution are high, and mosquito populations are high. Natular XRG may be applied at rates up to 20 lb per acre in waters high in organic content, deep-water mosquito habitats or those with dense surface cover, and where monitoring indicates a lack of kill at typical rates. Reapply after 30 [40] days. More frequent applications may be made if monitoring indicates that larval populations have reestablished or weather conditions have rendered initial treatments ineffective.

#### **Non-Crop Sites**

Apply Natular XRG in the following non-crop sites to kill mosquito larvae species:

**Temporary Standing Water:** Woodland pools, snow pools, roadside ditches, retention ponds, freshwater dredge spoils, tire tracks and other natural or manmade depressions, rock holes, pot holes and similar areas subject to holding water.

**Other Freshwater Sites:** Natural and manmade aquatic sites; edges of lakes, ponds, canals, stream eddies, creek edges, and detention ponds.

**Freshwater Swamps and Marshes:** Mixed hardwood swamps, cattail marsh, common reed wetland, water hyacinth ponds, and similar freshwater areas with emergent vegetation.

**Marine/Coastal Areas:** Intertidal areas above the mean high water mark, mangroves, brackish water swamps and marshes, coastal impoundments and similar areas.

**Stormwater/Drainage Systems:** Storm sewers, catch basins, drainage ditches, and similar areas.

**Wastewater:** Sewage effluent, sewers, sewage lagoons, cesspools, oxidation ponds, septic ditches and tanks, animal waste lagoons and settling ponds, livestock runoff lagoons, wastewater impoundments associated with fruit and vegetable processing, and similar areas.

**Dormant Rice Fields:** Impounded water in dormant rice fields (for application only during the interval between harvest and preparation of the field for the next cropping cycle).

**Natural and Artificial Containers:** Tree holes, bromeliads, leaf axils, and other similar natural water holding containers; cemetery urns, bird baths, flower pots, rain barrels, buckets, single tires, tires stockpiled in dumps, landfills, recycling plants and other similar areas, abandoned swimming pools, ornamental ponds, flooded roof tops and similar water holding sites; landfill containers, salvage yards, abandoned vehicles.

#### **Agricultural/Crop Sites Where Mosquito Breeding Occurs**

Apply Natular XRG at the rate of 5 to 20 lb per acre in standing water within agricultural/crop sites where mosquito breeding occurs to kill mosquito larvae species.

**Pastures/hay fields, rangeland, orchards, and citrus groves:** Do not apply to waters intended for irrigation.

#### **STORAGE AND DISPOSAL**

Do not contaminate water, food, or feed by storage and disposal.

**Pesticide Storage:** Store in a cool dry place in original container only.

**Pesticide Disposal:** Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

**Container Handling:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

**Manufactured by**  
**Clarke Mosquito Control Products, Inc.**  
**159 North Garden Avenue**  
**Roselle, IL 60172**

EPA Reg. No.: 8329-83

EPA Est.:

#### **Warranty**

To the extent consistent with applicable law, CLARKE MOSQUITO CONTROL PRODUCTS, INC. makes no warranty, express or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.

Lot: \_\_\_\_\_

Net Contents: \_\_\_\_\_

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Natular™ is a Trademark of Clarke Mosquito Control Products, Inc.